

THE
ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE
URBAN SANITARY DISTRICT
OF CAMBORNE,
FOR THE YEAR 1904.

CAMBORNE :

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Annual Report of the Medical Officer of Health

FOR THE

Urban Sanitary District of Camborne, Cornwall,

For the Year ending December 31st, 1904.

TO THE CHAIRMAN AND MEMBERS OF THE
CAMBORNE URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have again great pleasure in presenting to you my Annual Report on the Health and Sanitary Condition of your district for the year 1904.

POPULATION.

The population of your district at the census of 1901 was as follows :—

ECCLESIASTICAL DISTRICT.	MALES.	FEMALES.	TOTAL.
Camborne ...	3228	4295	7523
Tuckingmill ...	1416	1794	3210
Treslothan ...	1106	1277	2383
Penponds ...	730	880	1610
	6480	8246	14726

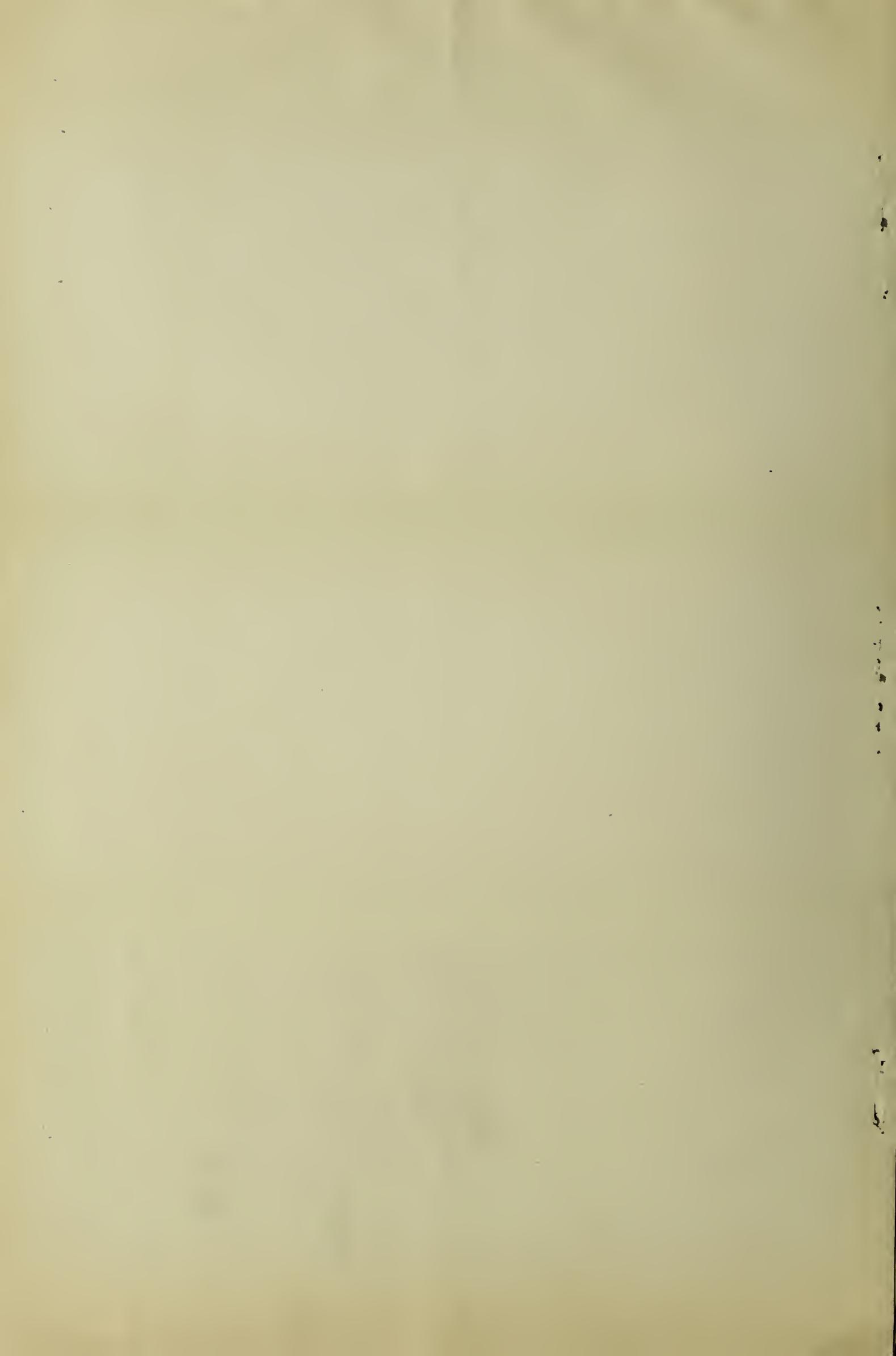
These figures give a total population of 14,726, made up of 6,480 males and 8,246 females, the considerable preponderance of females being mainly due to the fact of so many miners having left the locality and emigrated to South Africa, India, America, and other mining centres, in the majority of cases leaving their families at home, and maintaining them by monies earned abroad.

In consequence of this continued emigration, it is impossible to arrive at a correct estimate of the population, and I have taken the figures of 1901, in calculating the various statistics, as being less misleading.

The average population of your district for the past 50 years was 14,153.

AREA AND DENSITY OF POPULATION.

Your district has an area extending over 6,744 acres, and a density of population of 2·18 per acre. Some parts of your district however are rural in character, so that the density of population would vary considerably in the different localities.



INHABITED HOUSES.

The number of inhabited houses at the last census was 3,530, and of these 1,810 contained less than five rooms. These figures give an average of 4·16 persons per inhabited house.

BIRTHS.

During the year 1904 the Births of 379 children were registered, 208 Males and 171 Females. These give a Birth-rate of 25·73 per 1,000, as compared with one of 23·42 for 1903.

The following tables give the number of Births and Birth-rates for the past 10 years :—

DATE.	BIRTHS.	BIRTH RATE PER 1,000.
1895	457	31·08
1896	361	24·55
1897	377	25·64
1898	373	25·37
1899	377	25·64
1900	396	26·89
1901	392	26·61
1902	385	26·14
1903	345	23·42
1904	379	25·73

The average Birth-rate for the 10 years being 26·10 per 1,000.

The Birth-rate for the County of Cornwall for 1904 was 22·02, and for England and Wales 27·9 per 1,000.

ILLEGITIMATE BIRTHS.

The total number of Illegitimate Births registered during the year was 23, giving an Illegitimate Birth-rate of 1·56 per 1,000, and a proportion of 60 to 1,000 births, as compared with 40 for 1903, a rate above the average of the country generally.

DEATHS.

During the year 240 Deaths were registered, 123 Males and 117 Females, giving a Death-rate of 16·29 per 1,000, as compared with one of 15·89 for 1903.

The following table gives the number of Deaths and Death-rates for the past 10 years :—

DATE.	DEATHS.	DEATH RATE.
1895	303	20·61
1896	253	17·21
1897	245	16·66

1898	348	23·67
1899	251	17·07
1900	269	18·29
1901	252	17·11
1902	311	21·11
1903	234	15·89
1904	240	16·29

The average Death-rate for the past 10 years being 18·39 per 1,000.

The Death-rate for the County of Cornwall for 1904 was 14·46, and for England and Wales 16·2 per 1,000.

The ages at death were as follows :—

Under 1 year ... 60.	Between 45 and 55 ... 21.
Between 1 and 5 ... 18.	„ 55 „ 65 ... 26.
„ 5 „ 15 ... 3.	„ 65 „ 75 ... 34.
„ 15 „ 25 ... 10.	„ 75 „ 85 ... 24.
„ 25 „ 35 ... 20.	„ 85 „ 95 ... 10.
„ 35 „ 45 ... 14.	

NATURAL INCREASE.

The natural increase is 139, as compared with 111 for 1903, and 74 for 1902.

INFANTILE MORTALITY.

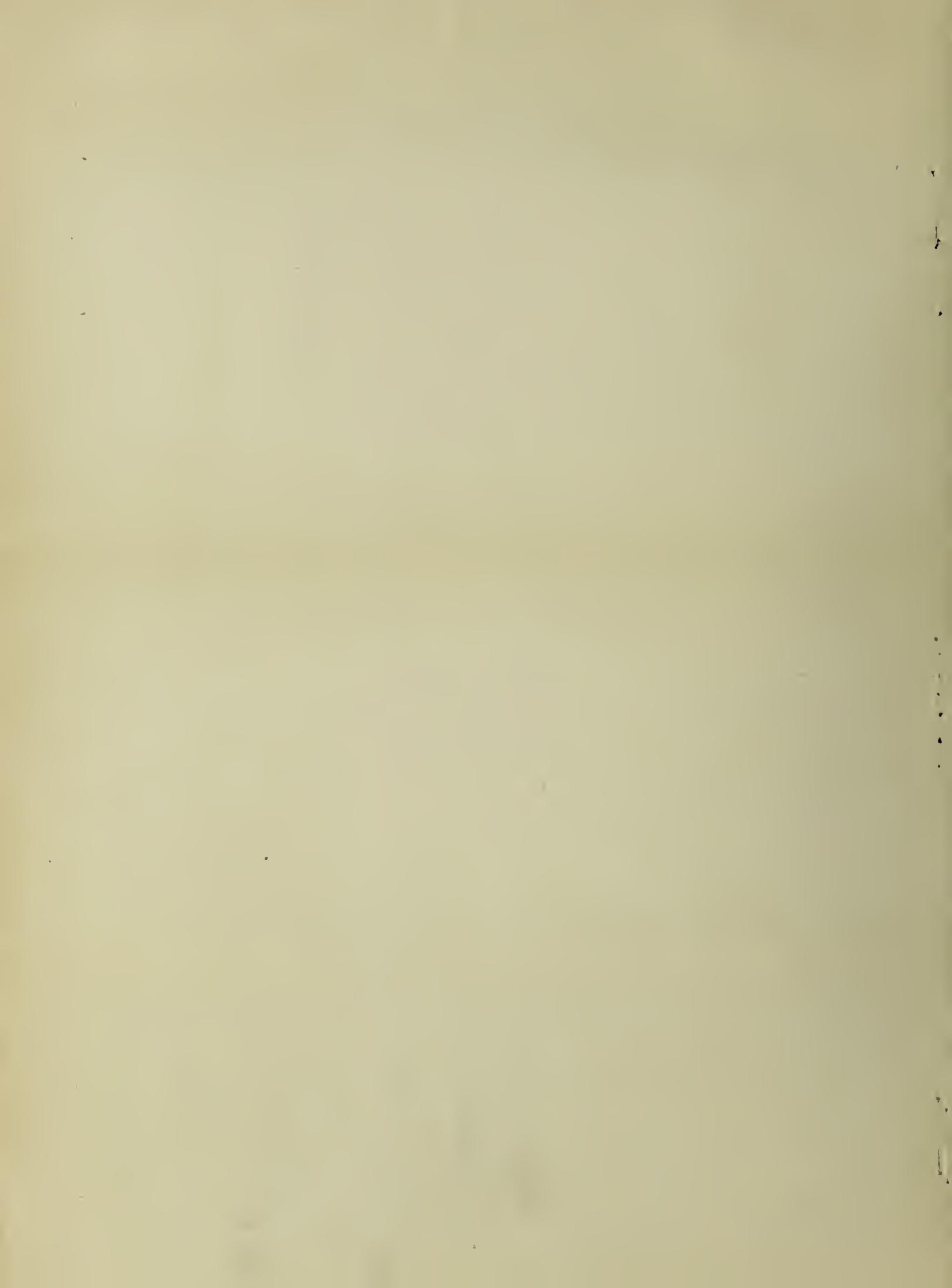
There were 60 deaths registered during the year in Infants under 1 year of age, and the causes of death were as follows :—

Bronchitis and Broncho Pneumonia 15.
Prematurity ... 13.	Inquest Cases 2.
Gastro Enteritis ... 9.	Diarrhœa 1.
Atrophy 5.	Tubercular Meningitis 1.
Whooping Cough ... 4.	Hereditary Syphilis 1.
Debility 4.	Intussusception ... 1.
Convulsions 3.	Spina Bifida ... 1.

These give an Infantile Mortality of 158 per 1,000 births, as compared with 153 for 1903, and 210 for 1902.

The following table gives the Infantile Mortality Rates for the past 10 years :—

DATE.	DEATHS UNDER 1 YEAR.	RATE PER 1,000	
		BIRTHS REGISTERED.	
1895	92	201	
1896	75	204	
1897	65	172	
1898	112	300	
1899	70	185	



1900	64	161
1901	48	122
1902	81	210
1903	53	153
1904	60	158

The average rate for the past 10 years being 186 per 1,000 Births.

The rate of Infantile Mortality for England and Wales for 1904 was 146 per 1,000 births.

45 of these 60 deaths were in Infants under six months of age, the ages at death being as follows :—

Under one day ...	3.	Under three months ...	9.
„ one week ...	3.	„ four months ...	3.
„ one month ...	13.	„ five months ...	2.
„ two months ...	10.	„ six months ...	2.

ZYMOTIC DEATH-RATE.

Eight deaths from Whooping Cough, one from Typhoid Fever, one from Membraneous Croup, and one from Diarrhoea, a total of 11 Deaths, give a Death-rate from Zymotic Diseases of 0·74 per 1,000, as compared with one of 0·40 for 1903, and one of 1·96 for 1902.

Considering that eight of these Deaths were from Whooping Cough, a disease which has nothing to do with insanitary conditions, this death-rate may be considered an extremely favourable one.

The Zymotic Death-rate for the County of Cornwall for 1904 was 0·57 per 1,000.

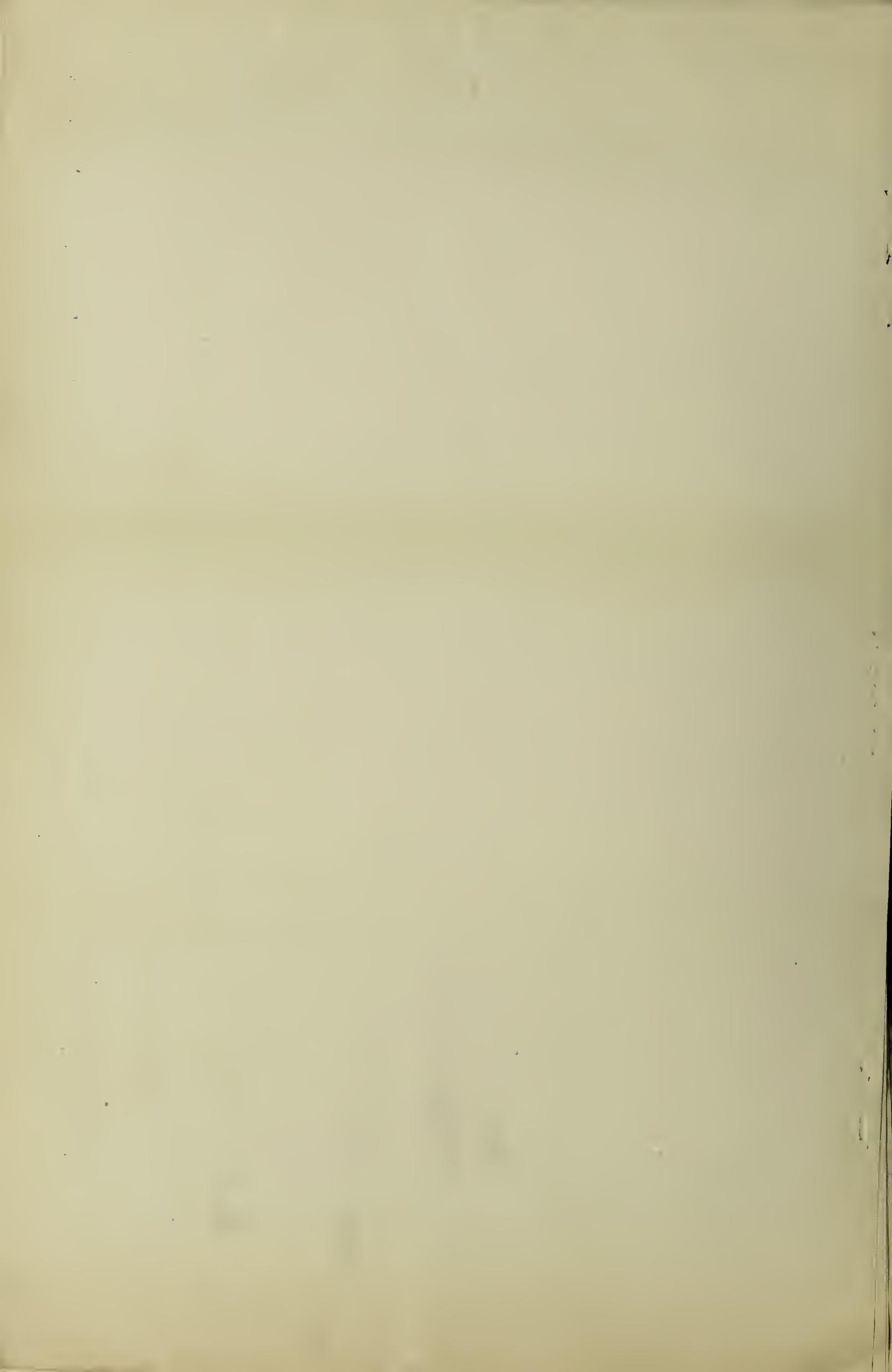
INQUEST CASES.

There were six Inquest cases during the year, and the deaths were attributed to the following causes :—

1. Accidentally killed in Dolcoath Mine—Injury to Spine.
2. Rupture of Aneurysm of Aorta.
3. Pulmonary Phthisis caused by inhalation of Rock Dust while working underground.
4. Accidentally suffocated while in an Epileptic Fit.
5. Congestion of Lungs.
6. Convulsions due to Rickets.

PHTHISIS.

There were forty-three deaths registered from Phthisis during the year, giving a Death-rate of 2·92 per 1,000, and a percentage of 17·91 of the total deaths, as compared with a rate of 2·85 per 1,000, and a percentage of 17·94 for 1903.



Twenty-two of these deaths were in Tin Miners, the average age at death being 42 years, and six were in Gold Miners, the average age at death being 39 years.

From the information available, however, it cannot be definitely stated whether this classification is correct or not, as in all probability many of those returned as Tin Miners had formerly worked abroad in Gold Mines where doubtless the initial mischief in the lungs was contracted.

Of the other deaths nine were in females and six in males. It is extremely probable however that of these latter, two or more had formerly been Miners.

During the past six years there have been 225 deaths registered from Phthisis in your district, and, considering that 151 of these were in Miners, and the very great majority of them men who had worked with Rock Drills either at home or abroad, the disease in their case was mainly if not entirely due to the inhalation of rock dust.

The statement therefore that has quite recently been publicly made, that the increase in the number of deaths from Phthisis in the Mining Division is due to the eating of Tuberculous Meat is, to say the least, quite erroneous.

It is probable however, that some of the cattle exposed for sale in your Cattle Market, are not as desirable for human food as they might be, and I would again strongly advise you to appoint a qualified Veterinary Inspector to periodically visit your Cattle Market, and advise you as to any animals that he may consider unfit for human consumption.

As doubtless all of you are aware, a report has recently been presented to The Secretary of State for the Home Department on the Health of Cornish Miners by Dr. J. S. Haldane, F.R.S., Mr. Joseph Martin one of H.M. Inspector of Mines, and your present chairman, Mr. Arthur Thomas, Manager of Dolcoath Mine.

The report which was "To enquire into and report upon the health of the miners employed in the mines in Cornwall, with special reference to the injurious effects alleged to be produced by the state of ventilation in the mines, the dust arising from the use of rock-drills, and the introduction of impurities into the working-places through the use of compressed air," is an extremely able and exhaustive one, and will well repay your careful perusal, interested as you all are in any means which can be taken to improve the health and working conditions of the miners of this district, which is situated in the centre of the Mining Industry.

They first give a series of figures which shew that "up to 1890-92 the death-rate amongst Cornish Miners was more or less abnormally high, but that only above the age of about 40 was the excess extremely marked. In 1900-02 on the other hand, the excess among tin miners, and still more among miners of all kinds living in Cornwall, was very greatly increased between the ages of about 25 and 50. Between these ages the death-rate among miners in Cornwall was from three to four times that among colliers and ironstone miners."

Then follow another series of tables which clearly show that :—

“The excessive mortality among miners in Cornwall, as compared with that among occupied males generally, and particularly among coal and ironstone miners, is due entirely to lung diseases. Apart from the tendency to lung diseases, Cornish Mining, is on the whole, an exceptionally healthy and fairly safe occupation, and as regards men up to the age of 45 shows marked improvement during the last 50 years, in accordance with the improvement among the population generally.”

“The excessive mortality from lung diseases had, up till 1892, only seriously affected men of over 40. During the last few years, however, there has been an enormous increase in the death-rate from lung diseases, particularly among younger men from about 25 to 45, with the result that the total death-rate at all ages from 25 to 55 is now far greater than at any previous period during the last 50 years. Between the ages of 25 and 45 the death-rate from lung diseases among miners living in Cornwall has recently been from eight to ten times the corresponding death-rate among coal miners or ironstone miners.”

“The recent rise in the death-rate is mostly due to the effects of work in mines in South Africa.”

“The fact that the excessive mortality among tin-miners is confined exclusively to “phthisis” and other diseases of the respiratory system, points at once to vitiation of the air as the probable cause.”

“The impurities met with in the air of mines consist chiefly of dust arising from blasting, drilling and handling the material mined.”

They then give figures which show conclusively that “the mortality from lung diseases among men working machine-drills, and therefore most exposed to dust, is enormously greater in proportion than among men not working machine-drills.”

“The death-rate among machine-men from respiratory diseases was about fifteen times and their total death-rate about eight times that for average occupied males in this country.”

“The death-rate among machine-men from respiratory diseases was about 30 times and the total death-rate about ten times as great as that among colliers or ironstone miners of the same age.”

“The proportion of deaths from lung diseases amongst Cornish Miners who had not worked rock-drills was about three times the normal, and the total death-rate about 1·8 times the normal, at the age in question.”

They then give figures from which “it seems probable that apart from the effects of rock-drill work in Cornwall and abroad, there has been, on the whole, some improvement in Cornish Mines, as regards the health and safety of the men.”

Then follow figures which show that “the conditions under which rock-drill work

has hitherto been carried out have been far more detrimental to health in Transvaal than in Cornish mines."

"So far as the Cornish miners are concerned it seems evident enough that the stone dust which they inhale produces permanent injury of the lungs—gradually in the case of ordinary miners, and rapidly in the case of machine-drill men—and that this injury, while it is apparently capable of gradually producing by itself great impairment of the respiratory functions, and indirectly of the general health, also predisposes enormously to tuberculosis of the lungs, so that a large proportion of miners die from tubercular phthisis. That the primary injury to the lungs is due solely to inhalation of stone-dust would seem to be practically certain."

They further state that "the dust produced by rock-drills can easily be prevented by even a very small water jet. The dust from blasting in close ends can be laid by a powerful jet of water and air; and can in any case be avoided by the men. The inhalation of dust produced in blasting on the stopes can also be to a large extent avoided; while the dust produced in handling the ore can be mostly prevented by keeping the workings damp."

The report concludes as follows :—

"We venture to express our conviction that there is no reason why work underground, in whatever kind of mine, should not be a perfectly healthy employment; the work itself is thoroughly wholesome both to body and mind, and the special dangers, whether to health or to life and limb, associated with different varieties of mining, are such as, if recognised and faced, can be avoided, provided that both employers and employed will co-operate in bringing this end about."

Then follow a series of recommendations resulting from which the following special rules have been drawn up by the Home Secretary in pursuance of Sect. 27 of the Metalliferous Mines Regulation Act 1872, and being approved by the various Mine Owners or their representatives in the County, are being enforced in the Mines in this district so far as is reasonably practicable.

1. "No person shall use or cause or allow to be used in the mine any percussion rock drill unless a water jet or spray or other means equally efficient is provided and used, so as entirely to prevent the escape of dust into the air."

2. "After blasting in any end, rise or other place, no person shall return to that place until after the lapse of at least half-an-hour, unless the air in such place has been cleared of the dust and smoke arising from such blasting by efficient ventilation, or other special means, or unless an effective respirator or other apparatus is used to prevent his inhaling such dust or smoke. Blasting shall be so arranged that men working in other places shall be exposed as little as practicable to dust and smoke."

3. In ends, or rises, and as far as practicable in other places, no person shall remove or cause or allow to be removed the rock broken if dry and dusty, unless it has been effectively damped so as to prevent the escape of dust into the air during removal."

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4. "The owner, agent or manager shall cause all stone breaking machines used at the mine to be provided and kept provided with an efficient watering or other arrangement to prevent the escape of dust into the air, and no person shall work or cause or allow to be worked any such machine unless such arrangement is provided and effectively used."

It is gratifying to know that the dangers referred to can be overcome by simple appliances if properly used, but if they are to prove effective the men themselves must feel the absolute necessity of using them, and endeavour to help the executive of the mines in every way in seeing that the rules and regulations are carried out.

There were three deaths registered from Tubercular Diseases other than Phthisis.

OTHER RESPIRATORY DISEASES.

There were 42 Deaths registered from Bronchitis and Pneumonia and 1 from Congestion of the Lungs, giving a Death-rate of 2·92 per 1,000, and a percentage of 17·91 of the total Deaths.

8 of these deaths occurred in March, and 14 in April, cold winds and a low temperature being very prevalent during these months. 9 of the 14 deaths in April were in Infants and the others in old people.

OTHER DISEASES.

There were 19 Deaths from Cancer and 14 from Heart Disease registered during the year.

INFECTIOUS DISEASES.

During the year 65 cases of Infectious Diseases were notified to me, viz:— 37 of Scarlatina, 18 of Erysipelas, 4 of Diphtheria, 1 of Membraneous Croup, 4 of Enteric Fever, and 1 of Continued Fever.

These give an Infectious Disease-rate of 4·47 per 1,000, as compared with one of 6·3 for 1903, and one of 7·26 for 1902.

SCARLET FEVER.

37 cases of Scarlet Fever were notified during the year as follows:—

January	...	4 cases.	August	...	1 case.
February	...	3 „	September	...	6 cases.
April	...	2 „	October	...	5 „
May	...	2 „	November	...	2 „
July	...	1 case.	December	...	11 „

These give a Disease-rate of 2·51 per 1,000, as compared with 39 cases and a Disease-rate of 2·64 for 1903.

All the cases were of an extremely mild type, and were characterized by an almost

entire absence of fever, a very faint rash and in some cases no rash at all, and very slight throat symptoms.

Judging from the great mildness of the symptoms there were doubtless several other unrecognised cases, and these mixing with other children, helped to spread the disease.

The cases were distributed over different parts of the district as follows :— Troon 7 cases, Tuckingmill 4 cases, Treswithian Downs 3 cases, Barreppar 3 cases, Enys Road 3 cases (in one house). 2 cases each at Carnarthen Street, Trelawney Road, Wellington Road, Basset Road, and Trellowarren Street, and 1 case each at Tehidy Road, Treveuson Street, Centenary Street, Albert Street, Vyvyan's Street, Roseworthy, and Stennack.

There were no deaths registered from this disease.

DIPHTHERIA.

Four cases of Diphtheria were notified during the year giving a Disease-rate of 0·27 per 1,000, as compared with one case and a rate 0·06 for 1903.

The cases were all of a mild type and no death occurred. The ages were 18, 14, 3½ and 2 years. One case which was imported from another district was notified at Beacon Hill in March, one case at Edward Street in May, and two cases at Mount Pleasure and Trelawney Road in December.

No apparent cause could be detected in either case.

MEMBRANOUS CROUP.

One fatal case of Membraneous Croup in a child 3 years of age was notified at Edward Street in January, giving a Disease and Death-rate of 0·06 per 1,000.

ENTERIC FEVER.

Four cases of Enteric Fever with one death were notified during the year, giving a Disease-rate of 0·27, and a Death-rate of 0·06 per 1,000.

Two cases were notified in October at Tuckingmill (Penlu Villas) and College Street, and at the latter place I discovered an untrapped drain within two or three feet of the back door, and this pointed to the possible origin of the attack.

Two cases were notified in December, one at College Street in the same house as the case notified in October, and one at Reskadinnick. The case at College Street was in a mother who had been nursing her sick child, and she in all probability contracted the disease in so doing. This case was removed to the Isolation Hospital, but, in spite of assiduous and skilled nursing, unfortunately proved fatal. At Reskadinnick I found that the child (4 years of age) had probably been drinking water from an open leat, which was polluted with sewage, and this in all probability accounted for the attack.

Particular directions were given in each case as to the disinfection of the stools and urine and their disposal, and the midden pits where they existed, were cleaned out and disinfected.

CONTINUED FEVER.

One case of Continued Fever was notified at Penponds in January in a girl of 14, giving a Disease-rate of 0·06 per 1,000.

ERYSIPelas.

18 cases of Erysipelas were notified during the year, giving a Disease-rate of 1·22 per 1,000, as compared with 28 cases and a Disease-rate of 1·90 for 1903.

There were no deaths registered from this disease.

PUERPERAL FEVER.

There was no case of this disease notified during the year.

WHOOPING COUGH.

Whooping Cough was epidemic over practically the whole of the district during the year, more particularly during the months of June, July, August and September.

There were 8 deaths registered from this disease as follows :— 1 in June, 2 in July, 3 in August, 1 in September, and 1 in October. 4 of the deaths were in Infants under one year of age, and the other 4 in Infants two years of age. These give a Death-rate of 0·54 per 1,000.

MEASLES.

There was no death registered from this disease during the year, nor, as far as I can ascertain, did any cases occur.

ANKYLOSTOMIASIS.

The number of cases of this disease have certainly decreased during the past twelve months, and in those who are affected the disease is being recognised in its early stages and successfully treated, and the very bad cases of extreme Anaemia of a year or two ago are now rarely seen.

The following rule is being enforced in the various mines in the district, and if the miners will only loyally conform to the rule, there is no reason why the cause of the disease should not be quite successfully dealt with, and the disease itself ultimately stamped out. It is a question whether it should not be made illegal to employ any miner underground who is evidently suffering from ankylostomiasis until he has undergone treatment, and is found to be free from the disease.

The rule mentioned above is as follows :—

“The owner, agent or manager (of a mine) shall cause a sufficient number of suitable sanitary conveniences to be provided above and below ground in suitable and convenient places for the use of the persons employed, and to be constantly kept in a cleanly and sanitary condition, and no person shall relieve his bowels below ground elsewhere than in those conveniences. No person shall soil or render unfit for use in any way

any convenience or sanitary utensil or appliance provided for the use of the persons employed. Pump cisterns, sumps and water accumulations in the mine shall not be directly or indirectly used as a sanitary convenience."

I am pleased to observe that the clause in the latter part of this rule has been inserted, especially having regard to the compulsory use of water for laying the dust from rock drills, which otherwise might be contaminated, as the practice hitherto has been to use pump cisterns, &c., as sanitary conveniences.

VACCINATION RETURNS.

During 1903, the latest date for which the returns are as yet available, out of 345 births, 258 were successfully vaccinated, 53 died unvaccinated, and 5 were "exempted" owing to "conscientious objections." Excluding those that died unvaccinated, these figures give a percentage of 88·3 as compared with 78·1 for 1902.

ISOLATION HOSPITAL.

The Isolation Hospital was used during the month of December for a case of Enteric Fever.

The present building, which is not properly adapted for the treatment of infectious cases, should only be looked upon as a temporary convenience, and the provision of a permanent building ought to engage your serious attention.

I am pleased to report that you have instructed your Hospital Committee to procure a suitable carriage for the conveyance of infectious cases to the Hospital, and this matter is now being dealt with by them.

I must again remind you that there is great need of a suitable caretaker with no family. The present condition of things is one which ought to be remedied, and this also is engaging the attention of your Hospital Committee, who are advertising for a suitable caretaker.

DISINFECTOR.

The Disinfecter at West Tolgus has been used on several occasions during the year for the disinfection of infected bedding, and various infected houses have been disinfected with formalin gas.

DRAINAGE.

During the latter part of the year a new main drain has been laid from the eastern end of Doleoath Road to the Steam Laundry of Pengegon, a distance of 1,360 feet, at an estimated cost of £150. A certain amount of delay has been experienced in the completion of this sewer, owing to the fact that it has to cross the Great Western Railway Company's line at Pengegon, but their sanction to this proceeding has now been obtained, and the work will be completed immediately.

The provision of this drain will do away with a nuisance which I have had to

bring to your notice on more than one occasion, and it is to be hoped that the drain will be extended so as to include the rest of Pengegon, at an early date.

I much regret to have to report that no progress has been made towards carrying out the scheme for the drainage of Beacon, Wheal Gerry, and a portion of Roskear Row since my last Annual Report. I must advise you that this matter is one which ought to engage your immediate attention.

Considerable misapprehension or ignorance seems to exist amongst local builders as to your Bye-laws dealing with drainage, and in the laying down of drains the following rules which exist in those Bye-laws should be enforced by your Council :—

1. All drains for the conveying of sewage shall have an internal diameter of not less than four inches, shall be laid in a bed of good concrete, with a proper fall, and with water-tight, socketed, or other suitable joints.

2. Every inlet to any drain shall be properly trapped.

3. Every drain which directly communicates with any sewer or other means of drainage into which such drain may lawfully empty, shall be provided with a suitable trap at a point as distant as practicable from the building, and as near as practicable to the point where the drain communicates with the sewer.

4. No right angled junction, either vertical or horizontal, shall be constructed in any drain, and every branch drain shall join another drain obliquely in the direction of the flow of such drain.

5. A disconnecting chamber shall be constructed as near as possible to the trap provided between the drain of the building and the sewer or other means of drainage with which it communicates.

6. The soil pipe from every water closet in a building shall be at least four inches in diameter, and be fixed outside such building and be continued upwards without diminution of its diameter, and (except where unavoidable) without any bend or angle being formed in such soil pipe to such a height and in such a position as to afford, by means of the open end of such soil pipe, a safe outlet for sewer air.

7. The waste pipe from every bath, sink, or lavatory, and every pipe in the building for carrying off waste water, shall be taken through an external wall of such building, and discharge in the open air over a channel leading to a trapped gully grating at least eighteen inches distant.

During the year the drains of 27 Houses have been connected with the sewers, and the drains of 27 others have been repaired and put in order.

2,056 feet of drain pipes have been laid during the year.

The nuisance at the top of Enys Road complained of in my last Annual Report has been remedied by the laying of a new drain.

A flushing tank is still required at Barreppar. This matter should be dealt with by your Council. The tank could be erected at a small outlay, and the necessary water for flushing could be obtained from the roof of the Wesleyan Chapel at the north end of the village. The Water Co. do not seem inclined to extend their supply to this village.

SEWAGE OUTFALLS.

The various sewage outfalls are in a far from satisfactory condition.

As stated in my report for 1903, your Surveyor is preparing a scheme which will, if adopted, enable you to carry by far the greater portion of your sewage into the sea at the North Cliffs. Considerable delay has taken place in the preparation of these plans owing to his unfortunate illness, but I trust it will now receive his immediate attention and that the scheme will shortly be submitted to you for your consideration. At the sewage outfall at Tuckingmill steps are being taken to obtain a lease of the land, so that it will be under the entire control of your Council. More of the available land will then be utilized, and other measures recommended by your Sanitary Committee (who have visited the spot on one or two occasions during the year) carried out, so that the nuisance complained of here from time to time will be effectively dealt with and remedied. I trust that steps will also shortly be taken to acquire the land at the College Row outfall, as recommended by your Sanitary Committee.

At Troon some less primitive and insanitary method of dealing with the sewage should be considered by your Council.

SCAVENGING.

During the year 3,826 loads of Manure and House Refuse have been removed from the vicinity of dwellings by your scavenging carts, four being constantly employed.

There are now 797 Ash Boxes and 80 Box Closets emptied by your Authority twice a week, as compared with 628 and 81 respectively for 1903.

You now systematically scavenge all parts of the town and Tuckingmill, Pengegon, Beacon, Troon, and Wheal Gerry, a great improvement on former years. I trust that this important duty will be extended shortly to all parts of your district, for if left to the occupiers of houses, it is only done in a haphazard way, or not at all. There are still in many places large accumulations of refuse in close vicinity to dwellings, and these cannot but be most injurious to the health of the inmates. There are also still many large uncovered and uncemented privy pits, and these should all be reconstructed in strict accordance with your Byelaws.

During the year 7 privies have been connected with Water Closets, and 11 new Water Closets have been provided in connection with private dwellings.

5 noticees were served on the owners of private dwellings for the providing of closet accommodation and 5 have been provided.

In all 163 notices have been served and the nuisances complained of abated.

NEW BUILDINGS.

37 plans were passed by your Council during the year, and these represent 33 new dwelling houses, and the enlargement of 15 others. 32 new Houses have been inspected and certified to be fit for occupation and these are provided with 19 water closets and 18 privies. It is unfortunately necessary in some cases to construct fixed receptacles for excrement, but when this has to be done, the receptacles should be of the smallest possible dimensions, the floor and sides should be cemented, and they should be covered so as to keep out any unnecessary moisture. Your Bye-laws dealing with these matters should be rigidly enforced.

HOUSE ACCOMMODATION.

As I have often previously stated in my former reports, the need still exists for houses of say four rooms at a low rental, and in the absence of these, it is a difficult matter to deal with the cases of overcrowding which are being brought to your notice.

I must call your attention to the absence of proper spouting for the conveyance of rain water from the roofs in many of the older houses, and this, giving rise as it must do to dampness of the foundations and walls, must constitute a source of danger to the health of the inmates.

WATER SUPPLY.

I have inspected the sources of the Camborne Water Co.'s supplies on several occasions during the year.

There has been no restriction in the water supply for any purpose during the year.

At *Boswyn* a supplementary Steam Boiler has been erected to replace the oil engine for pumping water, if necessary.

Water was being pumped from the shaft here from June 24th to October 25th.

At *Cargenwyn* a new additional filter bed twice the size of the former one and constructed on the most approved principles, is being built. It is proposed to filter the whole of the water from the Cargenwyn reservoirs through this and the other filter bed.

All the vegetation has been removed from the eastern end of No. 1 Reservoir.

Complaints have been made to me from time to time as to the scarcity of supply of water to some of the houses, owing to the incrustation of the pipes. I have drawn the attention of the Secretary of the Water Co. to these complaints, and he assures me they are being remedied as speedily as possible.

SLAUGHTER HOUSES.

There are 13 Slaughter Houses in your district. They are all registered, and have been frequently inspected during the year, and the bye-laws relating to them have been carried out.

DAIRIES, COWSHEDS AND MILKSHOPS.

There are 45 Dairies, Cowsheds, and Milkshops registered in your district.

Your Sanitary Committee are making a systematic inspection of them and will shortly present a report.

The condition of many of the Cowsheds is far from satisfactory, and I trust that the recommendations contained in the report will receive your serious attention.

BAKEHOUSES.

There are 5 Bakehouses registered in your district. They have been frequently inspected and found in a satisfactory condition.

COMMON LODGING HOUSE.

There is one Common Lodging House registered and the Bye-laws relating thereto are being complied with.

MEAT AND FISH MARKETS.

The Meat and Fish Markets have been inspected every week by your Sanitary Inspector and frequently by myself.

There has been no seizure of food as unfit for human consumption, nor any prosecution under the Sale of Food and Drugs Act.

OFFENSIVE TRADES.

There are no offensive trades carried on in your district, and there has been no death, nor, as far as I can ascertain, any disease directly traceable to lead, arsenic or phosphorous poisoning.

BURIAL GROUNDS.

The various Burial Grounds have been kept in a satisfactory condition, and are adequate for the present requirements of the district.

BYE-LAWS.

Bye-laws framed on the model Bye-laws are in existence in your district as follows :—

New Streets and Buildings	Nuisances
Slaughter Houses	Public Wash Houses
Common Lodging Houses	Hackney Carriages

Many of them require to be more rigidly enforced.

FACTORIES AND WORKSHOPS ACT, 1901.

There are about 50 Workshops in your district which come under this Act. I have inspected these and found them with one or two exceptions satisfactory. Those complained of are wanting in sufficient cubic air space, and have been brought to the notice of your Sanitary Committee.

I am, Gentlemen, your obedient servant,

J. TELFER THOMAS,

Medical Officer of Health.

Camborne, March 3rd, 1905.

SUMMARY OF VITAL STATISTICS FOR 1904.

Population (Census 1901) 14,726.

Area—6,744 acres.

Density of Population—2·18 per acre.

Inhabited Houses—3,530.

Houses with less than five rooms—1,810.

Birth-rate—25·73 per 1,000.

, Cornwall—22·02 per 1,000.

, England and Wales—27·9 per 1,000.

Illegitimate Birth-rate—1·56 per 1,000.

Death-rate—16·29 per 1,000.

, Cornwall—14·46 per 1,000.

, England and Wales—16·2 per 1,000.

Natural Increase—139.

Infantile Mortality—158 per 1,000 births.

, England and Wales—146 per 1,000 births.

Zymotic Death-rate—0·74 per 1,000.

, Cornwall—0·57 per 1,000.

Infectious Disease-rate—4·47 per 1,000.

Phthisis Death-rate—2·92 per 1,000.

Death-rate other Respiratory Diseases—2·92 per 1,000.

